

REMARKS

The Office Action mailed April 22, 2008, has been received and reviewed. Claims 1-17 and 29-36 are currently pending in the application. Claims 1-6, 8, 9, 12-17 and 29-36 stand rejected. Claims 7, 10 and 11 are objected to. Applicant has amended claims 29-32 and 34, and respectfully requests reconsideration of the application as amended herein.

No new matter has been added.

Claim Objections

Claim 29 is object to because of informalities. Specifically, claim 29 lists a double colon “::” and should instead be a single colon “:”. Applicant has amended claim 29 to correct the informality and respectfully requests the objection be withdrawn.

35 U.S.C. § 112 Claim Rejections

Claims 34-36 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Generally, the Office Action alleges the claims 34-36 contain subject matter which was not described in the specification at the time the application was filed. Specifically, the Office Action alleges claim 34 includes the steps “a first data rate less than a maximum data rate of a subscriber station” and “a second data rate adequate to handle an overflow up to the maximum data rate of the subscriber station” which were not disclosed in the original specification.

Applicant has amended “maximum data rate” of claim 34 to recite “full data rate” as supported by at least paragraph [0036] and original claims 5 and 13. Accordingly, Applicant respectfully requests the rejection be withdrawn.

35 U.S.C. § 101 Claim Rejections

Claims 29-33 were rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. Specifically, the claims are rejected as not reciting “the claimed computer-readable medium encoded with a computer program (or computer executable

instructions)."

In order to advance prosecution on the merits, Applicant has amended independent claims 29 to recite, in part, "A computer-readable medium including computer-executable instructions encoded thereon for performing the steps of" Claims 30-33 depend from amended independent claim 29. Accordingly, Applicant respectfully requests the rejections be withdrawn.

35 U.S.C. § 103 Obviousness Rejections

Claims 1-6, 8-9, 12-17 and 29-33 were rejected as being unpatentable over U.S. Patent 6,901,062 to Scherzer et al (hereinafter "Scherzer") and U.S. Patent 6,870,824 to Kim et al ("Kim") in view of U.S. Patent 6,424,631 to Czaja et al (hereinafter "Czaja"). Applicant respectfully traverses this rejection, as hereinafter set forth.

To establish a *prima facie* case of obviousness the prior art reference (or references when combined) **must teach or suggest all the claim limitations**. *In re Royka*, 490 F.2d 981, 985 (CCPA 1974); *see also* MPEP § 2143.03. Additionally, "[a] patent composed of several elements is not proved obvious merely by demonstrating that each element was, independently, known in the prior art . . . it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements" in the manner claimed. *KSU Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1731, 167 L.Ed.2d 705, 75 USLW 4289, 82 U.S.P.Q.2d 1385 (2007). Finally, to establish a *prima facie* case of obviousness there must be a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). Furthermore, the reason that would have prompted the combination and the reasonable expectation of success must be found in the prior art, common knowledge, or the nature of the problem itself, and not based on the Applicant's disclosure. *DyStar Textilfarben GmbH & Co. Deutschland KG v. C. H. Patrick Co.*, 464 F.3d 1356, 1367 (Fed. Cir. 2006); MPEP § 2144. Underlying the obvious determination is the fact that statutorily prohibited hindsight cannot be used. *KSU*, 127 S.Ct. at 1742; *DyStar*, 464 F.3d at 1367.

The 35 U.S.C. § 103(a) obviousness rejections of claims 1-6, 8-9, 12-17 and 29-33 are improper because the elements for a *prima facie* case of obviousness are not met. Specifically,

the rejection fails to meet the criterion that the prior art references must teach or suggest all the claims limitations.

Applicant respectfully asserts that Applicant's independent claims 1, 6, 17 and 29, each recite in part, "*to spread ... communications ... with ... orthogonal code[] assigned ... as a function of the data rate*". Accordingly, Applicant's invention claims spreading communications according to an orthogonal code selected based on the data rate.

The Office Action concedes:

Scherzer et al. and Kim et al. do not disclose determining whether to *spread* at least a portion of *communications* to said one of the subscriber stations *with* one of the *orthogonal codes assigned* to said one of the groups *as a function of the data rate*. (Office Action, p. 5; emphasis added).

The Office Action then alleges:

Czaja et al. teach determining whether to *spread* at least a portion of *communications* to said [] one of the subscriber stations *with* one of the *orthogonal codes assigned* to said one of the groups *as a function of the data rate* (Fig. 3, column 7, lines 47-66). (Office Action, p. 5; emphasis added).

Applicant respectfully disagrees with the characterization of the actual teaching of Czaja. Generally, Czaja teaches of variable data rate *baseband* (e.g., vocoder data) that is encoded, spread and modulated. Regarding any alleged teaching in Czaja of spreading communications with orthogonal codes assigned as a function of the data rate, Applicant respectfully disagrees. Czaja merely teaches:

... the vocoder 104 is configured to encode the user data 102 for formatting into a plurality of frames of various data rates. The *vocoder 104 selects a rate* for each frame based on the amount of speech activity at the transmitter, while for data transfer, the rate depends on the type of payload carried. The *spreader 106 is configured to generate a spread spectrum signal 114 based on the vocoder data* 2. (Czaja, col. 5, lines 50-56; emphasis added).

Specifically, Czaja teaches (1) any selection occurs in the decoder (not in the spreader), and (2) the spreader generates a spread spectrum signal based on the vocoder data (not data rate) (i.e., any resulting spread spectrum signal will naturally be the product of the input data). In contrast, Applicant's claimed invention recites, in part, "*to spread ... communications ... with*

... orthogonal code[] assigned ... as a function of the data rate”. Clearly, Czaja is entirely silent regarding spreading using a selected one (i.e., one or a different one) of an orthogonal code. Accordingly, Czaja could not teach spreading using a selected orthogonal code assigned as a function of the data rate as claimed by Applicant.

Regarding the Office Action’s citation in Czaja at Fig. 3 and column 7, lines 47-66, Applicant generally notes that Czaja’s Fig. 3 is a functional diagram of the Czaja’s Rate Determination Unit 208 of Czaja’s Fig. 1B. Applicant respectfully notes (1) Czaja’s Rate Determination Unit 208 is part of Czaja’s *receiver* 200 and (2) Czaja’s Rate Determination Unit 208 clearly receives *de-spread encoded data* (aka *soft symbol data*) 214. Accordingly, *any* determination occurring in Czaja’s Rate Determination Unit 208 as alleged in the Office Action’s citation to Czaja’s Fig. 3 cannot be a basis for teachings rejecting Applicant’s claimed invention including “*to spread ... communications ... with ... orthogonal code[] assigned ... as a function of the data rate*” since *de-spreading* in Czaja’s despreaders 206 has concluded by the time Czaja’s Rate Determination Unit 208 clearly receives *de-spread encoded data* (aka *soft symbol data*) 214. Applicant respectfully asserts Czaja clearly does not teach Applicant’s claim element of “*to spread ... communications ... with ... orthogonal code[] assigned ... as a function of the data rate*” as alleged by the Office Action.

Therefore, since Scherzer and Kim, as conceded in the Office Action, do not teach or suggest “*to spread ... communications ... with ... orthogonal code[] assigned ... as a function of the data rate*” as claimed by Applicant, and since Czaja clearly does not teach “*to spread ... communications ... with ... orthogonal code[] assigned ... as a function of the data rate*” as alleged by the Office Action, these references, either individually or in any proper combination, cannot render obvious, under 35 U.S.C. §103, Applicant’s invention as presently claimed in independent claims 1, 6, 17 and 29. Accordingly, Applicant respectfully requests the rejection of independent claims 1, 6, 17 and 29 be withdrawn.

The nonobviousness of independent claims 1, 6 and 29 precludes a rejection of claims 2-5 and 8, 9, 12-16 and 30-33 which variously depend therefrom because a dependent claim is obvious only if the independent claim from which it depends is obvious. *See In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), *see also* MPEP § 2143.03. Therefore, Applicant

requests that the Examiner withdraw the 35 U.S.C. § 103(a) obviousness rejection to independent claims 1, 6 and 29 and claims 2-5 and 8, 9, 12-16 and 30-33 which variously depend therefrom.

Objections to Claims 7, 10 and 11/Allowable Subject Matter

Claims 7, 10 and 11 stand objected to as being dependent upon rejected base claims, but are indicated to contain allowable subject matter and would be allowable if placed in appropriate independent form. Applicant acknowledges this indication with appreciation, but respectfully asserts that the claims in their present form, along with all other claims presently under consideration, are in condition for allowance.

CONCLUSION

Claims 1-17 and 29-36 are believed to be in condition for allowance, and an early notice thereof is respectfully solicited. Should the Examiner determine that additional issues remain which might be resolved by a telephone conference, the Examiner is respectfully invited to contact Applicant's undersigned attorney.

Respectfully submitted,

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